

June experiment plan

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1. Tune measurement

Tune measurement over large momentum range

- Horizontal & vertical tunes
- Use horizontal perturbator (in vacuum)
- Take finer points in injection energy region
- Record both double plate & two horizontal plate signals

Time requirement = 1 to 2 days of experimental time



2. Dispersion matching

- Adjust the injection line to match dispersion
 - based on simulation (S. Machida to update)

Time requirement = 1 day of experimental time



3. Energy loss

- Further attempt at energy loss measurement (C. Rogers to update on analysis)
 - Optimise RF frequency first (short bunch, no RF volts, take bunch monitor trace to measure revolution freq.)
 - Bucket seemed to be very small at low V in previous data, this time take more data at higher V (keeping in mind set vs read voltage)

Time requirement: 1 day experimental time (to do in detail)



Further work (if we get time)

Make an attempt at an emittance growth measurement?

Method 1: Last year (Nov) I had a look at turn-by-turn RF-OUT data, but using 5mm steps was not sufficient to see turnby-turn variation clearly...

Issues:

Limited by accuracy in step size of probe...

The beam may be bigger than the foil?







